

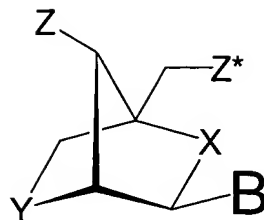
CLAIMS

1. A compound consisting of a total of 8-50 nucleotides and/or nucleotide analogues, wherein said compound comprises a subsequence of at least 8 nucleotides or nucleotide analogues, said subsequence being located within a sequence selected from the group consisting of SEQ ID NOS: 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143 and 144.
2. The compound according to claim 1, said subsequence being located within a sequence selected from the group consisting of SEQ ID NOS: 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132 and 133.
3. The compound according to claim 1 or 2 consisting of from 8-40 nucleotides.
4. The compound according to claim 3 consisting of from 8-20 nucleotides.
5. The compound according to claim 4 consisting of from 12-20 nucleotides.
6. The compound according to claim 5 consisting of 12, 13, 14, 15, 16, 17, 18, 19 or 20 nucleotides.
7. The compound according to claim 6 consisting of 14, 15, 16, 17 or 18 nucleotides.
8. The compound according to claim 5 consisting of from 15-17 nucleotides.
9. The compound according to claim 8 consisting of 15, 16 or 17 nucleotides.
10. The compound according to claim 8 consisting of 15 nucleotides.
11. The compound according to claim 9 consisting of 16 nucleotides.
12. The compound according to claim 9 consisting of 17 nucleotides.

13. The compound according to any one of the preceding claims, comprising a subsequence of at least 10 nucleotides or nucleotide analogues.
- 5 14. The compound according to any one of the preceding claims, comprising a subsequence of at least 12 nucleotides or nucleotide analogues.
15. The compound according to any one of the preceding claims, comprising a subsequence of at least 14 nucleotides or nucleotide analogues.
- 10 16. The compound according to any one of claims 1 to 13, comprising a subsequence of 10, 11, 12, 13 14 15 or 16 nucleotides or nucleotide analogues.
- 15 17. The compound according to any of claims 1-16, wherein said nucleotides comprise a linkage group selected from the group consisting of -O-P(O)₂-O-, -O-P(O,S)-O-, -O-P(S)₂-O-, -S-P(O)₂-O-, -S-P(O,S)-O-, -S-P(S)₂-O-, -O-P(O)₂-S-, -O-P(O,S)-S-, -S-P(O)₂-S-, -O-PO(R^H)-O-, O-PO(OCH₃)-O-, -O-PO(NR^H)-O-, -O-PO(OCH₂CH₂S-R)-O-, -O-PO(BH₃)-O-, -O-PO(NHR^H)-O-, -O-P(O)₂-NR^H-, -NR^H-P(O)₂-O-, -NR^H-CO-O-, -NR^H-CO-NR^H-, -O-CO-O-, -O-CO-NR^H-, -NR^H-CO-CH₂-, -O-CH₂-CO-NR^H-, -O-CH₂-CH₂-NR^H-, -CO-NR^H-CH₂-, -CH₂-NR^H-CO-, -O-CH₂-CH₂-S-, -S-CH₂-CH₂-O-, -S-CH₂-CH₂-S-, -CH₂-SO₂-CH₂-, -CH₂-CO-NR^H-, -O-CH₂-CH₂-NR^H-CO -, -CH₂-NCH₃-O-CH₂-, where R^H is selected from hydrogen and C₁₋₄-alkyl.
- 20 18. The compound according to any of claims 1-17, wherein said nucleotides comprise a linkage group selected from the group consisting of a phosphate group, a phosphorothioate group and a boranophosphate group.
- 25 19. The compound according to claim 18, wherein said linkage is a phosphate group.
20. The compound according to claim 17, wherein said linkage is phosphorothioate group.
- 30 21. The compound according to claim 20, wherein all nucleotides comprise a phosphorothioate group.
22. The compound according to any of the preceding claims, wherein at least one nucleotide is replaced by a corresponding nucleotide analogue.
- 35 23. The compound according to claim 22 comprising of from 1-50 nucleotide analogues.
24. The compound according to claim 23 comprising of from 2-45 nucleotide analogues.

25. The compound according to claim 24 comprising of from 3-40 nucleotide analogues.
26. The compound according to claim 25 comprising of from 4-35 nucleotide analogues.
- 5 27. The compound according to claim 26 comprising of from 5-30 nucleotide analogues.
28. The compound according to claim 27 comprising of from 6-25 nucleotide analogues.
- 10 29. The compound according to claim 28 comprising of from 6-20 nucleotide analogues.
30. The compound according to claim 29 comprising of from 6-12 nucleotide analogues.
31. The compound according to claim 30 comprising of from 8-12 nucleotide analogues.
- 15 32. The compound according to claim 30 comprising 6, 7, 8, 9, 10, 11 or 12 nucleotide analogues.
33. The compound according to claim 31 comprising of from 6-10 nucleotide analogues.
- 20 34. The compound according to claim 33 comprising 6, 7, 8, 9 or 10 nucleotide analogues.
35. The compound according to claim 34 comprising 7, 8 or 9 nucleotide analogues.
- 25 36. The compound according to claim 35 comprising 8 nucleotide analogues.
37. The compound according to any of claims 22-36, wherein all nucleotides are replaced by the corresponding nucleotide analogues.
- 30 38. The compound according to any of claims 22-36 comprising a nucleoside located at the 3' end.
40. The compound according to any of claims 22-39, wherein at least one of said nucleotide analogues is a locked nucleic acid (LNA) of the formula
- 35

100



wherein Z and Z* are independently absent, selected among an internucleoside linkage, a terminal group or a protecting group;

X and Y are independently selected from the group consisting of O, S, NR, CH₂, CH, (if part of a double bond), CH₂-O, CH₂-S, CH₂-NR, CH₂-CH₂, CH₂-CH (if part of a double bond) and CH=CH, where R is hydrogen or C₁₋₄-alkyl.

41. The compound according to claim 40, wherein X is O and Y is selected from the group consisting of O, S and NR, where R is hydrogen or C₁₋₄-alkyl.

10

42. The compound according to claim 41, wherein X is O and Y is selected from the group consisting of O, S and NH.

43. The compound according to claim 42, wherein X is O and Y is O.

15

44. The compound according to any of claims 40-46, wherein said LNA is in the β-D or alpha-L also form, preferably the β-D form.

45. The compound according to any of claims 40-44, wherein said nucleotides analogues
comprise a linkage group selected from the group consisting of -O-P(O)₂-O-, -O-P(O,S)-O-,
-O-P(S)₂-O-, -S-P(O)₂-O-, -S-P(O,S)-O-, -S-P(S)₂-O-, -O-P(O)₂-S-, -O-P(O,S)-S-, -S-
P(O)₂-S-, -O-PO(R^H)-O-, O-PO(OCH₃)-O-, -O-PO(NR^H)-O-, -O-PO(OCH₂CH₂S-R)-O-,
-O-PO(BH₃)-O-, -O-PO(NHR^H)-O-, -O-P(O)₂-NR^H-, -NR^H-P(O)₂-O-, -NR^H-CO-O-,
-NR^H-CO-NR^H-, -O-CO-O-, -O-CO-NR^H-, -NR^H-CO-CH₂-, -O-CH₂-CO-NR^H-, -O-CH₂-CH₂-NR^H-,
-CO-NR^H-CH₂-, -CH₂-NR^H-CO-, -O-CH₂-CH₂-S-, -S-CH₂-CH₂-O-, -S-CH₂-CH₂-S-, -CH₂-
SO₂-CH₂-, -CH₂-CO-NR^H-, -O-CH₂-CH₂-NR^H-CO-, -CH₂-NCH₃-O-CH₂-, where R^H is selected
from hydrogen and C₁₋₄-alkyl

46. The compound according to claim 45, wherein said nucleotides and/or nucleotide
analogues are linked to each other by means of a phosphate group.

47. The compound according to claim 45, wherein said nucleotides and/or nucleotide
analogues are linked to each other by means of a phosphorothioate group.

48. The compound according to claim 47, wherein said nucleotides and/or nucleotide analogues are linked to each other by means of a phosphorothioate group, X is O and Y is O, and said LNA is in the β -D form.

5 49. The compound according to any of claims 45-48, wherein said subsequence comprises a stretch of 2-6 LNAs as defined in any of claims 40-44 followed by a stretch of 4-12 nucleotides, which is followed by a stretch of 2-6 LNAs as defined in any of claims 40-44.

50. The compound according to claim 49, wherein said subsequence comprises a stretch of
10 4 LNAs as defined in any of claims 40-44 followed by a stretch of 8 nucleotides, which is followed by a stretch of 4 LNAs as defined in any of claims 40-44.

51. The compound according to claim 48, wherein said subsequence comprises a stretch of 2-6 LNAs as defined in any of claims 40-44 followed by a stretch of 4-12 nucleotides,
15 which is followed by a stretch of 2-5 LNAs as defined in any of claims 40-44, which is followed by a single nucleotide.

52. The compound according to claim 51, wherein said subsequence comprises a stretch of 4 LNAs as defined in any of claims 40-44 followed by a stretch of 8 nucleotides, which is
20 followed by a stretch of 3 LNAs as defined in any of claims 40-44, which is followed by a single nucleotide.

53. The compound according to claim 51 or 52, wherein said single nucleoside is located at the 3' end.

25

54. The compound according to any of claims 49-53, wherein said nucleosides and/or LNAs are linked to each other by means of a linkage group selected from the group consisting of a phosphate group, a phosphorothioate group and a boranophosphate group.

30 55. The compound according to claim 54, wherein said nucleosides and/or said LNAs are linked together by means of phosphate groups.

56. The compound according to claim 54, wherein said nucleosides and/or said LNAs are linked together by means of phosphorothioate groups.

35

57. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 2a.

58. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 3a.

59. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 4a.
60. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 5a.
- 5 61. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 6a.
62. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 7a.
63. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 8a.
- 10 64. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 9a.
65. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 10a.
- 15 66. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 11a.
67. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 12a.
68. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 13a.
- 20 69. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 14a.
70. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 15a.
- 25 57. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 117a.
57. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 118a.
58. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 119a.
- 30 59. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 120a.
60. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 121a.
- 35 61. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 122a.
62. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 123a.
63. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 124a.

64. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 125a.
65. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 126a.
- 5 66. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 127a.
67. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 128a.
- 10 68. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 129a.
69. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 130a.
70. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 131a.
- 15 71. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 132a.
72. The compound according to claim 56, wherein the subsequence is SEQ ID NO: 133a.
- 20 73. The compound according to any of claims 57-72, wherein the 3' end LNA is replaced by the corresponding natural nucleoside.
74. A compound consisting of SEQ ID NO: 2a.
- 25 75. A compound consisting of SEQ ID NO: 3a.
76. A compound consisting of SEQ ID NO: 4a.
77. A compound consisting of SEQ ID NO: 5a.
- 30 78. A compound consisting of SEQ ID NO: 6a.
79. A compound consisting of SEQ ID NO: 7a.
- 35 80. A compound consisting of SEQ ID NO: 8a.
81. A compound consisting of SEQ ID NO: 9a.
82. A compound consisting of SEQ ID NO: 10a.

83. A compound consisting of SEQ ID NO: 11a.
84. A compound consisting of SEQ ID NO: 12a.
- 5 85. A compound consisting of SEQ ID NO: 13a.
86. A compound consisting of SEQ ID NO: 14a.
- 10 87. A compound consisting of SEQ ID NO: 15a.
88. A compound consisting of SEQ ID NO: 117a.
89. A compound consisting of SEQ ID NO: 118a.
- 15 90. A compound consisting of SEQ ID NO: 119a.
91. A compound consisting of SEQ ID NO: 120a.
- 20 92. A compound consisting of SEQ ID NO: 121a.
93. A compound consisting of SEQ ID NO: 122a.
94. A compound consisting of SEQ ID NO: 123a.
- 25 95. A compound consisting of SEQ ID NO: 124a.
96. A compound consisting of SEQ ID NO: 125a.
- 30 97. A compound consisting of SEQ ID NO: 126a.
98. A compound consisting of SEQ ID NO: 127a.
99. A compound consisting of SEQ ID NO: 128a.
- 35 100. A compound consisting of SEQ ID NO: 129a.
101. A compound consisting of SEQ ID NO: 130a.

102. A compound consisting of SEQ ID NO: 131a.
103. A compound consisting of SEQ ID NO: 132a.
- 5 104. A compound consisting of SEQ ID NO: 133a.
105. The compound according to any of claims 74-104, wherein the 3' end LNA is replaced by the corresponding nucleotide.
- 10 106. A conjugate comprising the compound according to any of claims 1-73 and at least one non-nucleotide or non-polynucleotide moiety covalently attached to said compound.
107. A pharmaceutical composition comprising a compound as defined in any of claims 1-105 or a conjugate as defined in claim 106, and a pharmaceutically acceptable diluent,
15 carrier or adjuvant.
108. The pharmaceutical composition according to claim 107 further comprising at least one chemotherapeutic agent.
- 20 109. The pharmaceutical composition according to claim 108, wherein said chemotherapeutic compound is selected from the group consisting of adrenocorticosteroids, such as prednisone, dexamethasone or decadron; altretamine (hexalen, hexamethylmelamine (HMM)); amifostine (ethyol); aminoglutethimide (cytadren); amsacrine (M-AMSA); anastrozole (arimidex); androgens, such as
25 testosterone; asparaginase (elspar); bacillus calmette-gurin; bicalutamide (casodex); bleomycin (blenoxane); busulfan (myleran); carboplatin (paraplatin); carmustine (BCNU, BiCNU); chlorambucil (leukeran); chlorodeoxyadenosine (2-CDA, cladribine, leustatin); cisplatin (platinol); cytosine arabinoside (cytarabine); dacarbazine (DTIC); dactinomycin (actinomycin-D, cosmegen); daunorubicin (cerubidine); docetaxel (taxotere); doxorubicin
30 (adriamycin); epirubicin; estramustine (emcyt); estrogens, such as diethylstilbestrol (DES); etoposide (VP-16, VePesid, etopophos); fludarabine (fludara); flutamide (eulexin); 5-FUDR (floxuridine); 5-fluorouracil (5-FU); gemcitabine (gemzar); goserelin (zodalex); herceptin (trastuzumab); hydroxyurea (hydrea); idarubicin (idamycin); ifosfamide; IL-2 (proleukin, aldesleukin); interferon alpha (intron A, roferon A); irinotecan (camptosar);
35 leuprolide (lupron); levamisole (ergamisole); lomustine (CCNU); mechlorathamine (mustargen, nitrogen mustard); melphalan (alkeran); mercaptopurine (purinethol, 6-MP); methotrexate (mexate); mitomycin-C (mutamucin); mitoxantrone (novantrone); octreotide (sandostatin); pentostatin (2-deoxycoformycin, nipent); plicamycin (mithramycin, mithracin); prorocarbazine (matulane); streptozocin; tamoxifen (nolvadex);

taxol (paclitaxel); teniposide (vumon, VM-26); thiotepa; topotecan (hycamtin); tretinoin (vesanoid, all-trans retinoic acid); vinblastine (valban); vincristine (oncovin) and vinorelbine (navelbine).

- 5 110. A compound as defined in any of claims 1-105 or a conjugate as defined in claim 106 for use as a medicament.

111. Use of a compound as defined in any of claims 1-105 or as conjugate as defined in claim 106 for the manufacture of a medicament for the treatment of cancer.

10

112. Use according to claim 111, wherein said cancer is in the form of a solid tumor.

113. Use according to claim 111 or 112, wherein said cancer is a carcinoma.

- 15 114. Use according to claim 113, wherein said carcinoma is selected from the group consisting of malignant melanoma, basal cell carcinoma, ovarian carcinoma, breast carcinoma, non-small cell lung cancer, renal cell carcinoma, bladder carcinoma, recurrent superficial bladder cancer, stomach carcinoma, prostatic carcinoma, pancreatic carcinoma, lung carcinoma, cervical carcinoma, cervical dysplasia, laryngeal papillomatosis, colon
20 carcinoma, colorectal carcinoma and carcinoid tumors.

115. Use according to claim 114, wherein said carcinoma is selected from the group consisting of malignant melanoma, non-small cell lung cancer, breast carcinoma, colon carcinoma and renal cell carcinoma.

25

116. Use according to claim 115, wherein said malignant melanoma is selected from the group consisting of superficial spreading melanoma, nodular melanoma, lentigo maligna melanoma, acral melanoma, amelanotic melanoma and desmoplastic melanoma.

- 30 117. Use according to claim 111 or 112, wherein said cancer is a sarcoma.

118. Use according to claim 117, wherein said sarcoma is selected from the group consisting of osteosarcoma, Ewing's sarcoma, chondrosarcoma, malignant fibrous histiocytoma, fibrosarcoma and Kaposi's sarcoma.

35

119. Use according to claim 111 or 112, wherein said cancer is a glioma.

120. A method for treating cancer, said method comprising administering a compound as defined in any of claims 1-105, a conjugate as defined in claim 106 or a pharmaceutical composition as defined in any of claims 107-109 to a patient in need thereof.

5 121. The method according to claim 120, wherein said cancer is in the form of a solid tumor.

122. The method according to claim 120, wherein said cancer is a carcinoma.

10 123. The method according to claim 122, wherein said carcinoma is selected from the group consisting of malignant melanoma, basal cell carcinoma, ovarian carcinoma, breast carcinoma, non-small cell lung cancer, renal cell carcinoma, bladder carcinoma, recurrent superficial bladder cancer, stomach carcinoma, prostatic carcinoma, pancreatic carcinoma, lung carcinoma, cervical carcinoma, cervical dysplasia, laryngeal papillomatosis, colon
15 carcinoma, colorectal carcinoma and carcinoid tumors.

124. The method according to claim 123, wherein said carcinoma is selected from the group consisting of malignant melanoma, non-small cell lung cancer, breast carcinoma, colon carcinoma and renal cell carcinoma.

20

125. The method according to claim 124, wherein said malignant melanoma is selected from the group consisting of superficial spreading melanoma, nodular melanoma, lentigo maligna melanoma, acral melanoma, amelanotic melanoma and desmoplastic melanoma.

25 126. The method according to claim 120, wherein said cancer is a sarcoma.

127. The method according to claim 126, wherein said sarcoma is selected from the group consisting of osteosarcoma, Ewing's sarcoma, chondrosarcoma, malignant fibrous histiocytoma, fibrosarcoma and Kaposi's sarcoma.

30

128. The method according to claim 120 or 121, wherein said cancer is a glioma.

129. Use of a compound as defined in any of claims 1-105 or as conjugate as defined in claim 106 for the preparation of a medicament for the treatment of atherosclerosis, psoriasis, diabetic retinopathy, rheumatoid arthritis, asthma, warts and allergic dermatitis.
35

130. Use of a compound as defined in any of claims 1-105 or as conjugate as defined in claim 106 for the manufacture of a medicament for the treatment of cancer, wherein said medicament further comprises a chemotherapeutic agent selected from the group

- consisting of adrenocorticosteroids, such as prednisone, dexamethasone or decadron; altretamine (hexalen, hexamethylmelamine (HMM)); amifostine (ethyol); aminoglutethimide (cytadren); amsacrine (M-AMSA); anastrozole (arimidex); androgens, such as testosterone; asparaginase (elspar); bacillus calmette-gurin; bicalutamide
- 5 (casodex); bleomycin (blenoxane); busulfan (myleran); carboplatin (paraplatin); carmustine (BCNU, BiCNU); chlorambucil (leukeran); chlorodeoxyadenosine (2-CDA, cladribine, leustatin); cisplatin (platinol); cytosine arabinoside (cytarabine); dacarbazine (DTIC); dactinomycin (actinomycin-D, cosmegen); daunorubicin (cerubidine); docetaxel (taxotere); doxorubicin (adriomycin); epirubicin; estramustine (emcyt); estrogens, such as
- 10 diethylstilbestrol (DES); etoposide (VP-16, VePesid, etopophos); fludarabine (fludara); flutamide (eulexin); 5-FUDR (floxuridine); 5-fluorouracil (5-FU); gemcitabine (gemzar); goserelin (zodalex); herceptin (trastuzumab); hydroxyurea (hydrea); idarubicin (idarubicin); ifosfamide; IL-2 (proleukin, aldesleukin); interferon alpha (intron A, roferon A); irinotecan (camptosar); leuprolide (lupron); levamisole (ergamisole); lomustine
- 15 (CCNU); mechlorathamine (mustargen, nitrogen mustard); melphalan (alkeran); mercaptopurine (purinethol, 6-MP); methotrexate (mexate); mitomycin-C (mutamycin); mitoxantrone (novantrone); octreotide (sandostatin); pentostatin (2-deoxycoformycin, nipent); plicamycin (mithramycin, mithracin); prorocarbazine (matulane); streptozocin; tamoxifen (nolvadex); taxol (paclitaxel); teniposide (vumon, VM-26); thiotepa; topotecan
- 20 (hycamtin); tretinoin (vesanoid, all-trans retinoic acid); vinblastine (valban); vincristine (oncovin) and vinorelbine (navelbine).

131. The use according to claim 130, wherein the chemotherapeutic agent is selected from taxanes such as Taxol, Paclitaxel or Docetaxel.

25

132. Use of a compound as defined in any of claims 1-105 or as conjugate as defined in claim 106 for the manufacture of a medicament for the treatment of cancer, wherein said treatment further comprises the administration of a further chemotherapeutic agent selected from the group consisting of adrenocorticosteroids, such as prednisone,
- 30 dexamethasone or decadron; altretamine (hexalen, hexamethylmelamine (HMM)); amifostine (ethyol); aminoglutethimide (cytadren); amsacrine (M-AMSA); anastrozole (arimidex); androgens, such as testosterone; asparaginase (elspar); bacillus calmette-gurin; bicalutamide (casodex); bleomycin (blenoxane); busulfan (myleran); carboplatin (paraplatin); carmustine (BCNU, BiCNU); chlorambucil (leukeran); chlorodeoxyadenosine
- 35 (2-CDA, cladribine, leustatin); cisplatin (platinol); cytosine arabinoside (cytarabine); dacarbazine (DTIC); dactinomycin (actinomycin-D, cosmegen); daunorubicin (cerubidine); docetaxel (taxotere); doxorubicin (adriomycin); epirubicin; estramustine (emcyt); estrogens, such as diethylstilbestrol (DES); etoposide (VP-16, VePesid, etopophos); fludarabine (fludara); flutamide (eulexin); 5-FUDR (floxuridine); 5-fluorouracil (5-FU);

gemcitabine (gemzar); goserelin (zodalex); herceptin (trastuzumab); hydroxyurea (hydrea); idarubicin (idamycin); ifosfamide; IL-2 (proleukin, aldesleukin); interferon alpha (intron A, roferon A); irinotecan (camptosar); leuprolide (lupron); levamisole (ergamisole); lomustine (CCNU); mechlorathamine (mustargen, nitrogen mustard); melphalan (alkeran);

5 mercaptopurine (purinethol, 6-MP); methotrexate (mexate); mitomycin-C (mutamucin); mitoxantrone (novantrone); octreotide (sandostatin); pentostatin (2-deoxycoformycin, nipent); plicamycin (mithramycin, mithracin); prorocarbazine (matulane); streptozocin; tamoxifen (nolvadex); taxol (paclitaxel); teniposide (vumon, VM-26); thiotepa; topotecan (hycamtin); tretinoin (vesanoid, all-trans retinoic acid); vinblastine (valban); vincristine

10 (oncovin) and vinorelbine (navelbine).

133. The use according to claim 132, wherein said treatment further comprises the administration of a further chemotherapeutic agent selected from taxanes, such as Taxol, Paclitaxel or Docetaxel.

15

134. A method for treating cancer, said method comprising administering a compound as defined in any of claims 1-105, a conjugate as defined in claim 106 or a pharmaceutical composition as defined in any of claims 107-109 to a patient in need thereof and further comprising the administration of a further chemotherapeutic agent selected from the

20 group consisting of adrenocorticosteroids, such as prednisone, dexamethasone or decadron; altretamine (hexalen, hexamethylmelamine (HMM)); amifostine (ethyol); aminoglutethimide (cytadren); amsacrine (M-AMSA); anastrozole (arimidex); androgens, such as testosterone; asparaginase (elspar); bacillus calmette-gurin; bicalutamide (casodex); bleomycin (blenoxane); busulfan (myleran); carboplatin (paraplatin);

25 carmustine (BCNU, BiCNU); chlorambucil (leukeran); chlorodeoxyadenosine (2-CDA, cladribine, leustatin); cisplatin (platinol); cytosine arabinoside (cytarabine); dacarbazine (DTIC); dactinomycin (actinomycin-D, cosmegen); daunorubicin (cerubidine); docetaxel (taxotere); doxorubicin (adriomycin); epirubicin; estramustine (emcyt); estrogens, such as diethylstilbestrol (DES); etoposide (VP-16, VePesid, etopophos); fludarabine (fludara);

30 flutamide (eulexin); 5-FUDR (floxuridine); 5-fluorouracil (5-FU); gemcitabine (gemzar); goserelin (zodalex); herceptin (trastuzumab); hydroxyurea (hydrea); idarubicin (idamycin); ifosfamide; IL-2 (proleukin, aldesleukin); interferon alpha (intron A, roferon A); irinotecan (camptosar); leuprolide (lupron); levamisole (ergamisole); lomustine (CCNU); mechlorathamine (mustargen, nitrogen mustard); melphalan (alkeran);

35 mercaptopurine (purinethol, 6-MP); methotrexate (mexate); mitomycin-C (mutamucin); mitoxantrone (novantrone); octreotide (sandostatin); pentostatin (2-deoxycoformycin, nipent); plicamycin (mithramycin, mithracin); prorocarbazine (matulane); streptozocin; tamoxifen (nolvadex); taxol (paclitaxel); teniposide (vumon, VM-26); thiotepa; topotecan

(hycamtin); tretinoin (vesanoid, all-trans retinoic acid); vinblastine (valban); vincristine (oncovin) and vinorelbine (navelbine).

135. A method for treating cancer, said method comprising administering a compound as
5 defined in any of claims 1-105, a conjugate as defined in claim 106 or a pharmaceutical
composition as defined in any of claims 107-109 to a patient in need thereof and further
comprising the administration of a further chemotherapeutic agent selected from the
group consisting of taxanes, in particular Taxol, Paclitaxel or Docetaxel.
- 10 136. A method of treating a mammal suffering from or susceptible from an disease caused
by abnormal angiogenesis, comprising: administering to the mammal an therapeutically
effective amount of an oligonucleotide targeted to survivin that comprises one or more LNA
units.
- 15 137. A method of preventing or limiting apoptosis comprising the administration of a
compound as defined in any of claims 1-105, a conjugate as defined in claim 106 or a
pharmaceutical composition as defined in any of claims 107-109.
138. A method of preventing cellular proliferation comprising the administration of a
20 compound as defined in any of claims 1-105, a conjugate as defined in claim 106 or a
pharmaceutical composition as defined in any of claims 107-109.